

WHAT IS CLAIMED IS:

1. An electrostatic actuator comprising:
  - a movable electrode disposed for relative displacement along a basement plane and defining first and second opposed surfaces opposed to each other;
  - a first stable electrode wall opposed to the first opposed surface of the movable electrode;
  - a second stable electrode wall opposed to the second opposed surface of the movable electrode; and
  - an insulating solid piece connecting the first and second stable electrode walls.
2. The electrostatic actuator according to claim 1, wherein said insulating solid piece is made of any of silicon dioxide, silicon nitride, alumina, glass and resin.
3. The electrostatic actuator according to claim 1, wherein said first and second stable electrode walls extend in parallel with each other.
4. The electrostatic actuator according to claim 1, wherein said movable electrode is a frame member surrounding the first and second stable electrode walls.
5. The electrostatic actuator according to claim 1, wherein at least one of the first and second stable electrode walls stands on the basement plane.
6. The electrostatic actuator according to claim 1, wherein at least one of the first and second stable electrode walls is fixed to the basement plane with an insulating layer.

7. A method of making an electrostatic actuator, comprising:

overlaying a subsidiary substrate over a base substrate holding an insulating film between the subsidiary substrate and the base substrate;

forming a void in the subsidiary substrate so as to allow the surface of the insulating film to get exposed at a bottom of the void;

filling the void with an insulating material; and

carving a pair of stable electrodes out of the subsidiary substrate, said insulating material being interposed between the stable electrodes.

8. The method according to claim 7, further comprising:

carving a movable electrode out of the subsidiary substrate when the stable electrodes are carved; and

removing the insulating film from a space between the movable electrode and the base substrate.

9. The method according to claim 8, wherein said insulating film remains between the stable electrodes and the base substrate when the insulating film is removed.